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Towards higher order numerical stochastic perturbation computation applied to the twisted Eguchi-Kawai model

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We have evaluated perturbation coefficients of Wilson loops up to $O(g^8)$ for the four-dimensional twisted Eguchi-Kawai model using the numerical stochastic perturbation theory (NSPT) in arXiv:1902.09847. In this talk we present the progress report on the higher order calculation up to $O(g^{63})$, for which we apply the fast Fourier transformation (FFT) based convolution algorithm to the multiplication of polynomial matrices in the NSPT to achieve higher order calculation.

Authors: GONZALEZ-ARROYO, Antonio (Universidad Autonoma de Madrid); KANAMORI, Issaku (R-CCS, RIKEN); ISHIKAWA, Ken-Ichi (Hiroshima University); Mr MIYAHANA, Kanata (Hiroshima University); Dr OKAWA, Masanori; Mr UENO, Ryoichiro (Hiroshima University)

Presenter: ISHIKAWA, Ken-Ichi (Hiroshima University)

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